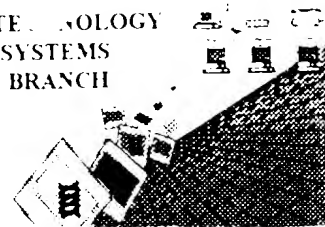


Patent

BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/202,549E
Source: 1600
Date Processed by STIC: 1/27/03

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

1600

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/202,549E

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 ☐ Wrapped Nucleics
Wrapped Aminos
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 ☐ Invalid Line Length
The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 ☐ Misaligned Amino
Numbering
The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 ☐ Non-ASCII
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 ☒ Variable Length
Sequence(s) 3 contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 ☐ PatentIn 2.0
"bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s). Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 ☐ Skipped Sequences
(OLD RULES)
Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 ☐ Skipped Sequences
(NEW RULES)
Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 9 ☐ Use of n's or Xaa's
(NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 ☐ Invalid <213>
Response
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 ☐ Use of <220>
Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 ☐ PatentIn 2.0
"bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 ☐ Misuse of n
n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.



1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/202,549E

DATE: 11/14/99
TIME: 10:41:23

Excerpt p 2

Input Set : A:\EP.txt

Output Set: N:\CRF4\01272003\I202549E.raw

```

4 <110> APPLICANT: Tsiichlis, Philip
5           Grimes, Leighton H
6           Zweidler-McKay, Patrick
7 <210> TITLE OF INVENTION: NUCLEIC ACID MOLECULE FOR ENHANCING GENE EXPRESSION
12 <130> FILE REFERENCE: FCCC96-11
13 <141> CURRENT APPLICATION NUMBER: US 09/202,549E
16 <141> CURRENT FILING DATE: 1999-10-12
19 <150> PRIOR APPLICATION NUMBER: PCT/US97/10486
20 <151> PRIOR FILING DATE: 1997-06-17
23 <150> PRIOR APPLICATION NUMBER: US 66/019,808
24 <151> PRIOR FILING DATE: 1996-06-17
27 <160> NUMBER OF SEQ ID NOS: 70
30 <170> SOFTWARE: PatentIn version 3.1
33 <210> SEQ ID NO: 1
34 <211> LENGTH: 12
35 <212> TYPE: DNA
36 <213> ORGANISM: Artificial Sequence
W--> 37 <220> FEATURE:
38 <223> OTHER INFORMATION: Gfi-1 binding sequence
W--> 39 <220> FEATURE:
40 <221> NAME/KEY: misc_feature
41 <222> LOCATION: (1)..(1)
42 <223> OTHER INFORMATION: "n" is any nucleotide
W--> 44 <220> FEATURE:
45 <221> NAME/KEY: misc_feature
46 <222> LOCATION: (9)..(9)
47 <223> OTHER INFORMATION: "n" is any nucleotide
49 <4000> SEQUENCE: 1
W--> 50 naaatcacng ca 12
51 <210> SEQ ID NO: 2
54 <211> LENGTH: 12
55 <212> TYPE: DNA
56 <213> ORGANISM: Artificial Sequence
58 <220> FEATURE:
59 <223> OTHER INFORMATION: Gfi-1 binding sequence
W--> 60 <220> FEATURE:
61 <221> NAME/KEY: misc_feature
62 <222> LOCATION: (2)..(4)
63 <223> OTHER INFORMATION: "n" is "t" or "a"
64 <4000> SEQUENCE: 1
W--> 66 taaatcacng ca 12
67 <210> SEQ ID NO: 3
68 <211> LENGTH: 12

```

RAW SEQUENCE LISTING

PATENT APPLICATION N: US/09/202,549E

DATE: 11/27/03

TIME: 11:11:11

Input Set : A:\EP.txt

Output Set : N:\CRF4\01272003\I202549E.raw

71 <210> TYPE: DNA
 72 <211> ORGANISM: Artificial Sequence
 73 <212> FEATURE:
 74 <213> OTHER INFORMATION: An expression regulatory DNA segment
 W--> 76 <220> FEATURE:
 77 <221> NAME/KEY: misc_feature
 78 <222> LOCATION: (1)..(1)
 79 <223> OTHER INFORMATION: "n" is any nucleotide
 W--> 81 <220> FEATURE:
 82 <221> NAME/KEY: misc_feature
 83 <222> LOCATION: (3)..(3)
 84 <223> OTHER INFORMATION: "n" is any nucleotide
 W--> 86 <220> FEATURE:
 87 <221> NAME/KEY: misc_feature
 88 <222> LOCATION: (4)..(5)
 89 <223> OTHER INFORMATION: "n" is "g" "c" or "t", or is absent, or is an oligonucleotide
 91 of
 92 two or more nucleotides
 W--> 92 <220> FEATURE:
 93 <221> NAME/KEY: misc_feature
 94 <222> LOCATION: (6)..(6)
 95 <223> OTHER INFORMATION: "n" is "a" "g" or "c", or is absent, or is an oligonucleotide
 97 of
 98 two or more nucleotides
 W--> 98 <220> FEATURE:
 99 <221> NAME/KEY: misc_feature
 100 <222> LOCATION: (9)..(9)
 101 <223> OTHER INFORMATION: "n" is "a" "g" or "c", or is absent, or is an oligonucleotide
 102 of
 103 two or more nucleotides
 104 <40> SEQUENCE: 3
 W--> 105 nannnnacng ca 12
 108 <210> SEQ ID NO: 4
 109 <211> LENGTH: 24
 110 <212> TYPE: DNA
 111 <213> ORGANISM: Artificial Sequence
 112 <214> FEATURE:
 113 <215> OTHER INFORMATION: Gfi-1 binding sequence
 W--> 115 <220> FEATURE:
 116 <221> NAME/KEY: misc_feature
 117 <222> LOCATION: (2)..(2)
 118 <223> OTHER INFORMATION: "i" is "a" or "c"
 W--> 121 <220> FEATURE:
 122 <221> NAME/KEY: misc_feature
 123 <222> LOCATION: (7)..(7)
 124 <223> OTHER INFORMATION: "n" is "inosine" or "c"
 W--> 126 <220> FEATURE:
 127 <221> NAME/KEY: misc_feature
 128 <222> LOCATION: (11)..(15)
 129 <223> OTHER INFORMATION: "i" is "i" or "c"
 131 <40> SEQUENCE: 4
 W--> 132 anaaaanaaa tcacgcata tgcc 24

variable length
 - see error summary
 sheet item 5

RAW SEQUENCE LISTING

PATENT APPLICATION N: US/09/202,549E

DATE: 11/17/03

TIME: 12:11:03

Input File: A:\EP.txt

Output File: N:\CRF4\01272003\I202549E.raw

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143 <210> SEQ ID NO: 5
144 <211> LENGTH: 33
145 <212> TYPE: DNA
146 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: Gfi-1 binding sequence
149 <400> SEQUENCE: 5
144 accatcaca cacaatacac tgcctatcct gtc 33
147 <210> SEQ ID NO: 6
148 <211> LENGTH: 33
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial Sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Gfi-1 binding oligonucleotide
153 <400> SEQUENCE: 6
154 accatcaca cacaatacac tgcctatcct gtc 33
157 <210> SEQ ID NO: 7
158 <211> LENGTH: 24
159 <212> TYPE: DNA
160 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Gfi-1 binding oligonucleotide
163 <400> SEQUENCE: 7
164 caccacatg atcactgct atcc 24
167 <210> SEQ ID NO: 8
168 <211> LENGTH: 24
169 <212> TYPE: DNA
170 <213> ORGANISM: Artificial Sequence
171 <220> FEATURE:
172 <223> OTHER INFORMATION: Gfi-1 binding oligonucleotide
173 <400> SEQUENCE: 8
174 caccacata ctactgct atcc 24
177 <210> SEQ ID NO: 9
178 <211> LENGTH: 24
179 <212> TYPE: DNA
180 <213> ORGANISM: Artificial Sequence
181 <220> FEATURE:
182 <223> OTHER INFORMATION: Gfi-1 binding oligonucleotide
183 <400> SEQUENCE: 9
184 caccacataa ataatgct atcc 24
187 <210> SEQ ID NO: 10
188 <211> LENGTH: 24
189 <212> TYPE: DNA
190 <213> ORGANISM: Artificial Sequence
191 <220> FEATURE:
192 <223> OTHER INFORMATION: Gfi-1 binding oligonucleotide
193 <400> SEQUENCE: 10
194 caccacataa ataatgct atcc 24
197 <210> SEQ ID NO: 11

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/202,549E

DATE: 12/21/2003

TIME: 11:11:11

Input File: A:\EP.txt

Output File: N:\CRF4\01272003\I202549E.raw

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114 <210> LENGTH: 14
115 <211> TYPE: DNA
116 <212> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <223> OTHER INFORMATION: Gfi-1 binding oligonucleotide
215 <400> SEQUENCE: 11
216 caccatataa atcaattcct atcc 24
217 <210> SEQ ID NO: 12
218 <211> LENGTH: 500
219 <212> TYPE: DNA
220 <213> ORGANISM: Artificial Sequence
221 <220> FEATURE:
222 <223> OTHER INFORMATION: Gfi-1 binding sequence
223 <400> SEQUENCE: 12
224 cccgcctgg ctgacggccc aagcaccccc cggcattcac gtcataaatg acgtatgttc 60
225 ccatagtaac gccaataggg accttccatt gacgtcaatg ggtggagtat ttaagggtaa 120
226 ctgcccctc ggaggtacat caagtgtatc atatgccaa g taaggccctc attgaagtca 180
227 atgaaggtaa atggcccggc tggcattatg ccagtagcat gacattatgg gaatttccca 240
228 attgacgcta catctacgta ttagtcatcg ctattaccat ggtgatggcg ttttggcagt 300
229 acatcaatgg gctgggatag cggtttgact caaggggagt tccaagtctc caccocattg 360
230 agtcaatgg gagtttgttt tggcaccaaa ctcaacggga ctttccaaaa tgtcgtaaca 420
231 actcggccc attgacgcaa atgggcggta ggcgtgtacg gtgggaggtc tatataagca 480
232 gagtcgttt agtgaacgct 500
233 <210> SEQ ID NO: 13
234 <211> LENGTH: 500
235 <212> TYPE: DNA
236 <213> ORGANISM: Artificial Sequence
237 <220> FEATURE:
238 <223> OTHER INFORMATION: Gfi-1 binding sequence
239 <400> SEQUENCE: 13
240 gccgcctgg ctgacggccc aagcaccccc cgggattgac gtcataaatg acgtatgttc 60
241 ccatagtaac gccaataggg accttccatt gacgtcaatg ggtggagtat ttaagggtaaa 120
242 ctgcccctc ggaggtacat caagtgtatc atatgccaa g taaggccctc attgaagtca 180
243 atgaaggtaa atggcccggc tggcattatg ccagtagcat gacattatgg gaatttccca 240
244 attgacgcta catctacgta ttagtcatcg ctattaccat ggtgatggcg ttttggcagt 300
245 acatcaatgg gctgggatag cggtttgact caaggggagt tccaagtctc caccocattg 360
246 agtcaatgg gagtttgttt tggcaccaaa ctcaacggga ctttccaaaa tgtcgtaaca 420
247 actcggccc attgacgcaa atgggcggta ggcgtgtacg gtgggaggtc tatataagca 480
248 gagtcgttt agtgaacgct 500
249 <210> SEQ ID NO: 14
250 <211> LENGTH: 500
251 <212> TYPE: DNA
252 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: Gfi-1 binding sequence
255 <400> SEQUENCE: 14
256 gccgcctgg ctgacggccc aagcaccccc cgggattgac gtcataaatg acgtatgttc 60
257 ccatagtaac gccaataggg accttccatt gacgtcaatg ggtggagtat ttaagggtaaa 120
258 ctgcccctc ggaggtacat caagtgtatc atatgccaa g taaggccctc attgaagtca 180

```

RAW SEQUENCE LISTING

PATENT APPLICATION N: US/09/202,549E

DATE: 11/27/03

TIME: 11:54:11

Input Set : A:\EP.txt

Output Set: N:\CRF4\01272003\I202549E.raw

```

290 atgaggttaa atggcorgcc tggcattatg accagtaaat gacattatgg gacttttata 241
291 atggcagta calcaatga atagatag ataatcaa gggatgggg atggggag 312
292 aatat aatgg ggttgatag aggtttaa caaggaatt taaagttctt caaggtatg 313
293 aggt aatgg gactttttt tttttttttt ataatggga atttcaaaa tttttttt 412
294 aatc gcccc attgaagcaa atggggggta gggtgtacg gtggggaggta tatataagca 487
300 gagctcggtt agtgaacgt 500
303 <210> SEQ ID NO: 15
304 <211> LENGTH: 12
305 <212> TYPE: DNA
306 <213> ORGANISM: Artificial Sequence
307 <214> FEATURE:
308 <215> OTHER INFORMATION: Gfi-1 binding sequence
310 <400> SEQUENCE: 15
311 caaa'caaa'a aa 12
315 <210> SEQ ID NO: 16
316 <211> LENGTH: 11
317 <212> TYPE: DNA
318 <213> ORGANISM: Artificial Sequence
319 <214> FEATURE:
320 <215> OTHER INFORMATION: Gfi-1 binding sequence
322 <400> SEQUENCE: 16
323 taattctgtg tg 12
327 <210> SEQ ID NO: 17
328 <211> LENGTH: 12
329 <212> TYPE: DNA
330 <213> ORGANISM: Artificial Sequence
331 <214> FEATURE:
332 <215> OTHER INFORMATION: Gfi-1 binding sequence
334 <400> SEQUENCE: 17
337 gaaatcagtt aa 12
340 <210> SEQ ID NO: 18
341 <211> LENGTH: 11
342 <212> TYPE: DNA
343 <213> ORGANISM: Artificial Sequence
344 <214> FEATURE:
345 <215> OTHER INFORMATION: Gfi-1 binding sequence
347 <400> SEQUENCE: 18
350 gaaatcagtc ca 12
353 <210> SEQ ID NO: 19
354 <211> LENGTH: 11
355 <212> TYPE: DNA
356 <213> ORGANISM: Artificial Sequence
357 <214> FEATURE:
358 <215> OTHER INFORMATION: Gfi-1 binding sequence
360 <400> SEQUENCE: 19
363 g-aatcagtt aa 12
366 <210> SEQ ID NO: 20
367 <211> LENGTH: 12
368 <212> TYPE: DNA

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLI. NO: US/09/202,549EDATE: 11/27/03
TIME: 11:01:13

Input Seq: A:\EP.txt

Output Seq: N:\CRF4\01272003\I202549E.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 1,9
Seq#:2; N Pos. 9
Seq#:3; N Pos. 1,3,4,5,6,9
Seq#:4; N Pos. 2,7,15

VERIFICATION SUMMARY

PATENT APPLICATION N: US/09/202,549E

DATE: 1/27/03

TIME: 11:01:14

Input Set : A:\EP.txt

Output Set: N:\CRF4\01272003\I202549E.raw

L:57 M:1 W: Missing Blank Line separator, <220> field identifier
L:58 M:1 W: Missing Blank Line separator, <220> field identifier
L:59 M:41 W: (4) "n" or "Xaa" used, for SEQ ID#:1 after pos.:
L:60 M:283 W: Missing Blank Line separator, <220> field identifier
L:66 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:
L:76 M:283 W: Missing Blank Line separator, <220> field identifier
L:106 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:
L:116 M:283 W: Missing Blank Line separator, <220> field identifier
L:132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:
L:162 M:283 W: Missing Blank Line separator, <220> field identifier